

CLAIMS

1. A method of controlling at least a first window lifter motor that closes a first window pane and a second window lifter motor that closes a second window pane, comprising:

detecting when the first window pane is approaching a fully closed position;
checking whether the second window pane is approaching the fully closed position;
moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position; and
moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position.

2. The method as claimed in claim 1, wherein the detecting step comprises evaluating a signal indicating a rotational position of the first window lifter motor.

3. The method as claimed in claim 1, wherein the detecting step comprises detecting whether the first window pane has arrived at an end zone located directly before the fully closed position of the first window pane.

4. The method as claimed in claim 3, wherein the end zone covers approximately 4 mm before the fully closed position.

5. The method as claimed in claim 1, wherein the checking step comprises checking whether the second window lifter is transmitting a blocking signal indicating that the second window pane is in an end zone thereof.

6. The method as claimed in claim 1, wherein the approximately closed position corresponds to a position where at least one of the first and second window pane contacts a corresponding seal with low force.

7. The method as claimed in claim 1, further comprising:
checking whether a third window lifter is transmitting a blocking signal when the first window pane reaches the approximately closed position;
starting a counter corresponding to a waiting time if the checking step does not detect a blocking signal; and
moving the first window pane to the fully closed position and transmitting a blocking signal when the counter has reached a predetermined value corresponding to the waiting time.
8. The method as claimed in claim 1, further comprising transmitting a blocking signal when the first window pane is moved to the fully closed position.
9. The method as claimed in claim 1, wherein the step of moving the first window pane to the fully closed position comprises pressing the first window pane against a seal until blocking of the window lifter motor occurs.
10. The method as claimed in claim 1, further comprising checking whether a vehicle engine is running, wherein the steps of checking whether the second window pane is approaching the fully closed position and moving the first window pane to an approximately closed position are executed only when the vehicle engine is running.

11. A window lifter control system comprising:
a first and a second window lifter motor;
a first and a second controller that drive the first and second window lifter motors, respectively; and
a first and second sensor that respectively detect a position of the first and second window pane associated with the first and second window lifter motor, respectively,
wherein the first and second controllers each comprise
a blocking signal generator that generates a blocking signal when at least one of the first and second sensor indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and
a checking circuit that checks whether one of said first and second controllers is transmitting a blocking signal,
wherein the first controller causes the first window lifter motor to move the first window pane to an approximately closed position if the checking circuit detects the blocking signal from the second controller and causes the first window lifter motor to move the first window pane to a fully closed position if the checking circuit does not detect the blocking signal from the second controller.
12. The window lifter control system as claimed in claim 11, wherein the sensor is a Hall effect sensor that senses the position of a rotor of the window lifter motor.
13. The window lifter control system as claimed in claim 11, wherein the first and second controllers each further comprise a counter, wherein the counter in the first controller delays movement of the first window pane to the fully closed position by the first window lifter motor until the counter has reached a predetermined value corresponding to a waiting time.
14. The window lifter control system as claimed in claim 13, wherein respective waiting times corresponding to the counters in the first and second controllers are different.

15. The window lifter control system as claimed in claim 11, wherein the blocking signal generator generates the blocking signal when the first window lifter motor moves the first window pane to the fully closed position.

16. The window lifter control system as claimed in claim 11, wherein the first and second controllers control the first and second window lifter motors, respectively, by pulse width modulation.

17. The window lifter control system as claimed in claim 11, wherein the first and second controllers are connected to a bus.

18. The window lifter control system as claimed in any of claims 11, wherein the checking circuit and the blocking signal generator are integrated together to form a blocking signal checking and generating circuit.